# Course Syllabus

# Point Loma Nazarene University School of STEM

# **CIT4081 IT Research Project**

Spring 2025 - Online (1 Credit Hour)

**Time and Place:** Online and anytime

**Instructor:** Mike Leih, Ph.D. (619) 349-3008

mleih@pointloma.edu (mailto:mleih@pointloma.edu)

office: RS 240

**Final Exam:** The final report and presentation will be considered the final exam and will be

submitted and presented on April 12, 2025

#### Office Hours:

Students are welcome to contact me via e-mail and schedule an appointment at any time, as I am available. Appointments can be face-to-face in my office, on the phone, or via a video conference call.

**Text:** No text required.

# **Needed Supplies:**

Students will need access to a computer and a high-speed internet connection, MS Word, MS PowerPoint, and other required software and hardware required to complete their research.

# **Course Description:**

The CIT4081 course is a study of a selected problem or topic in Information Technology under the direction of a faculty adviser. The faculty adviser and student propose the research topic and course

deliverables. Approval by the program director or department chair is required. The course may be repeated for a total of two units. The course is graded Credit/No Credit only.

# Philosophy and Approach:

Research in learning theory shows that students who learn technology effectively must be actively involved in the process, not just passive listeners/observers. In particular, to really learn and understand technological ideas and concepts, one must become deeply involved in activities such as exploring, discussing, analyzing, explaining, testing, and evaluating. To do this, you need good problems to solve, interaction with others on solutions, and opportunities to write your conclusions and present ideas.

# **Course Learning Outcomes:**

- 1. Students will be able to apply their technical knowledge to research a problem or topic.
- 2. Students will be able to speak about their work with precision, clarity and organization.
- 3. Students will be able to write about their work with precision, clarity and organization.
- 4. Students will be able to identify, locate, evaluate, and effectively and responsibly use and cite information for the task at hand.
- 5. Students will be able to gather relevant information, examine information and form a conclusion based on that information.
- 6. Students will be able to understand and create arguments supported by quantitative evidence, and they can clearly communicate those arguments in various formats.

# **Program Learning Outcomes:**

Graduates will have a coherent and broad-based knowledge of the discipline of Computer Information Technology.

- 1. Students will be able to identify and evaluate information technology infrastructure necessary to meet an organization's business needs.
- 2. Students will be able to develop, plan and evaluate appropriate processes for managing information systems and information technology projects.
- 3. Students will be able to design, develop, and evaluate software solutions to meet an organization's business needs.
- 4. Students will be able to apply their technical knowledge to solve problems.
- 5. Students will be able to speak about their work with precision, clarity and organization (Oral Communication).
- 6. Students will be able to write about their work with precision, clarity and organization (Written Communication).

- 7. Students will collaborate effectively in teams.
- 8. Students will be able to identify, locate, evaluate, and effectively and responsibly use and cite information for the task at hand (Information Literacy).
- 9. Students will be able to gather relevant information, examine information and form a conclusion based on that information (Critical Thinking).
- 10. Students will be able to understand and create arguments supported by quantitative evidence, and they can clearly communicate those arguments in various formats (Quantitative Reasoning).
- 11. Students will understand the professional, ethical, legal, security and social issues and responsibilities with the implementation and use of information technology.
- 12. Computer Information Technology graduates will be adequately prepared for entry into graduate school or jobs in the computing profession.

# **Program Learning Outcomes Assessed in this Course:**

Outcome: Students will be able to speak about their work with precision, clarity and organization (Oral Communication).

Assessment Tool: Paper presentation

Outcome: Students will be able to write about their work with precision, clarity and organization (Written Communication).

Assessment Tool: Final paper

Outcome: Students will be able to identify, locate, evaluate, and effectively and responsibly use and cite information for the task at hand (Information Literacy).

Assessment Tool: Final paper

#### Required Assignments and Deliverables:

This course has 10 assignments and deliverables that must **all** be completed and accepted to pass this course.

- 1. Posting your research topic and explanation in the online discussion forum.
- 2. Respond to at least two of your classmate's research topic postings.
- 3. Perspective Topic document.
- 4. Initial Literature Review document.
- 5. Outline Draft
- 6. First Draft
- 7. Paper Review by Tutor.com.
- 8. Final Paper Document (2500+ words).

- 9. Final Paper Research Presentation Document (7 to 11 slides).
- 10. Final Paper Presentation and Presentation day attendance.

# **Grading:**

This class is graded pass/fail as determined by the requirements described in this syllabus and on the class schedule. You will have a number of intermediate assignments that you must complete and turn in via Canvas. To earn a passing grade in the course, all assignments must be completed, submitted on time, and considered acceptable by the instructor. Note that there are eight ways to fail: 1) not participating in the online discussion (initial post and responses to fellow students), 2) not completing a course deliverable, 3) being late or submitting unacceptable work on three or more items, 4) not submitting the final report by the due date, 5) not presenting the final report, 6) scoring "low satisfaction" or below on two or more items on the written report rubric, 7) submitting a final paper that is less than minimum word count (including any additional word count penalties due to late work), 8) submitting work that contains work plagiarized from another source, including work generated by an Al.

# **Late Work Policy**

The only late work accepted will be for the Research Idea Discussion, Discussion Response, Perspective Topic, Initial Literature Review, Outline Draft, First Draft, and Writing Lab Review assignments. Late work will not be accepted for the Final Paper Document, Research Presentation Document, and Presentation Day assignments (unless, of course, there is an obvious emergency). If any allowable assignment is submitted late or is submitted on time but is in an unacceptable state, the word count of the final research paper will be increased by 500 words. Being late on three or more items will result in failing the course. Late submission for the Final Paper Document, Research Presentation Document or arriving late to the Presentation day will result in a failing grade in the course. Having a submission not accepted due to poor work is also considered having submitted as being late.

#### **Credit Hour:**

In the interest of providing sufficient time to accomplish the stated course learning outcomes, this class meets the PLNU credit hour policy for a 1-unit class delivered over 15 weeks. It is anticipated that you will spend a minimum of 37.5 participation hours per credit hour in your course. The estimated time expectations for this course are shown below:

Topic selection and discussion	5

Topic Research	15
Writing drafts	10
Writing final paper and presentation	8
TOTAL	38

# **Final Research Paper and Presentation**

The final research paper and presentation document must be submitted 5 days before the presentation. Students must attend the presentation day, present their research, and attend the presentation of their fellow students.

# **Technical Support:**

Please contact IT Services (ITS) at 619-849-2222 for technical support if your account gets locked out or you need a password reset. If you call after hours (between 6 pm and 11 pm), and the matter is urgent, you may leave a voice mail message and mark the message as urgent. The on-call technician will respond to you within 30 minutes.

# **University Mission:**

#### To Teach ~ To Shape ~ To Send

Point Loma Nazarene University exists to provide higher education in a vital Christian community where minds are engaged and challenged, character is modeled and formed, and service becomes an expression of faith. Being of Wesleyan heritage, we aspire to be a learning community where grace is foundational, truth is pursued, and holiness is a way of life.

#### **Department Mission:**

The Mathematical, Information, and Computer Sciences department at Point Loma Nazarene University is committed to maintaining a curriculum that provides its students with the tools to be productive, the passion to continue learning, and Christian perspectives to provide a basis for making sound value judgments.

#### **Academic Accommodations:**

PLNU is committed to providing equal opportunity for participation in all its programs, services, and activities in accordance with the Americans with Disabilities Act (ADA). Students with disabilities may request course-related accommodations by contacting the Educational Access Center (EAC), located in the Bond Academic Center (EAC@pointloma.edu (mailto:EAC@pointloma.edu) or 619-849-2486). Once a student's eligibility for an accommodation has been determined, the EAC will work with the student to create an Accommodation Plan (AP) that outlines allowed accommodations. The EAC makes accommodations available to professors at the student's request.

PLNU highly recommends that students speak with their professors during the first two weeks of each semester/term about the implementation of their AP in that particular course. Accommodations are not retroactive so clarifying with the professor at the outset is one of the best ways to promote positive academic outcomes.

Students who need accommodations for a disability should contact the EAC as early as possible (i.e., ideally before the beginning of the semester) to ensure appropriate accommodations can be provided. It is the student's responsibility to make the first contact with the EAC. Students cannot assume that because they had accommodations in the past, their eligibility at PLNU is automatic. All determinations at PLNU must go through the EAC process. This is to protect the privacy of students with disabilities who may not want to disclose this information and are not asking for any special accommodations.

# **Artificial Intelligence (AI) Policy:**

You are allowed to use Artificial Intelligence (AI) tools (e.g, ChatGPT, iA Writer, Marmot, Botowski) to generate ideas, but you are not allowed to use AI tools to generate content (text, video, audio, images) that will end up in any work submitted to be graded for this course unless explicitly called for in the assignment instructions. If you have any doubts about using AI, please gain permission from the instructor.

### E-mail and Messages:

It is expected that students regularly use e-mail. The instructor will periodically send you information and updates via e-mail and/or via canvas. In the first week of class, you <u>must</u> activate your PLNU e-mail account if you are not currently using it. Please send questions about specific problems or course details to the instructor by posting them in Canvas so that all members of the class can see the response.

#### **Additional Course Information:**

Additional PLNU policies and practices ⇒ (https://docs.google.com/document/d/1RcF7S-KrVqgSVzcIL1SnUjTlalcySL8l/edit?usp=sharing&ouid=116164865489739533893&rtpof=true&sd=true%20) that apply to this course can be found at the following link:

https://docs.google.com/document/d/1RcF7S-KrVqgSVzcIL1SnUjTlalcySL8I/edit?usp=sharing&ouid=116164865489739533893&rtpof=true&sd=true (https://docs.google.com/document/d/1RcF7S-KrVqgSVzcIL1SnUjTlalcySL8I/edit?usp=sharing&ouid=116164865489739533893&rtpof=true&sd=true)

# **Course Summary:**

Date	Details Du
Sun Jan 19, 2025	Research Idea Discussion (https://canvas.pointloma.edu/courses/78461/assignments/1126a02) by 11:59pr
Sun Jan 26, 2025	Discussion Response (https://canvas.pointloma.edu/courses/78461/assignments/1126a0a) by 11:59pr
Sun Feb 2, 2025	Research Topic Proposal  (https://canvas.pointloma.edu/courses/78461/assignments/1126a0@ by 11:59pr
Sun Feb 9, 2025	Expanded Resource List  Summary  (https://canvas.pointloma.edu/courses/78461/assignments/1126506) by 11:59pr
Sun Feb 23, 2025	Thesis Statement Draft and Outline (https://canvas.pointloma.edu/courses/78461/assignments/1126507)
Sun Mar 9, 2025	First Draft (https://canvas.pointloma.edu/courses/78461/assignments/1126a0a) by 11:59pr

Date	Details Due
Sun Mar 23, 2025	Tutor.com Paper Review (https://canvas.pointloma.edu/courses/78461/assignments/1126a1a) by 11:59pm
Tue Apr 8, 2025	Final Paper Document  (https://canvas.pointloma.edu/courses/78461/assignments/1126a) by 11:59pm
	Research Presentation  Document  (https://canvas.pointloma.edu/courses/78461/assignments/1126510)  iv
Sat Apr 12, 2025	Presentation Day  (https://canvas.pointloma.edu/courses/78461/assignments/11265@9e by 9:30am